

AMENDMENTS

In the Claims:

54. (Currently Amended) A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a ~~minimum~~ maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

55. (Currently Amended) Seed produced by the plant of claim 54, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

56. (Currently Amended) Progeny seed produced from crossing the broccoli plant of claim 54 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

57. (Currently Amended) A commercially acceptable broccoli plant or its parts produced from the seed of claim ~~56~~ 54.

58. (Currently Amended) A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 57, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said regenerated plant.

59. (Currently Amended) A tissue culture of the broccoli plant of claim 57 according to claim 58 comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said regenerated plant.

60. (Currently Amended) A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 59 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

61. (Currently Amended) A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

62. (Currently Amended) Seed produced by the plant of claim 61, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

63. (Currently Amended) Progeny seed produced from crossing the broccoli plant of claim 61 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

64. (Currently Amended) A commercially acceptable broccoli plant or its parts produced from the seed of claim 63 ~~64~~.

65. (Currently Amended) A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 64, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said regenerated plant.

66. (Currently Amended) A tissue culture of the broccoli plant of claim 64 according to claim 65 comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said regenerated plant.

67. (Currently Amended) A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 67 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

68. (Currently Amended) A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 85°F for at least 15 days during the growth cycle of said plant.

69. (Currently Amended) Seed produced by the plant of claim 68, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said plant.

70. (Currently Amended) Progeny seed produced from crossing the broccoli plant of claim 68 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said plant.

71. (Original) A commercially acceptable broccoli plant or its parts produced from the seed of claim 70.

72. (Currently Amended) A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 71, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said regenerated plant..

73. (Currently Amended) A tissue of the broccoli plant of claim 71 ~~culture according to claim 72~~ comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said regenerated plant.

74. (Currently Amended) A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 73 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 85°F for at least 15 20 days during the growth cycle of said plant.

75. (Currently Amended) A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 80°F for at least 20 days during the growth cycle of said plant.

76. (Currently Amended) Seed produced by the plant of claim 75, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said plant.

77. (Currently Amended) Progeny seed produced from crossing the broccoli plant of claim 75 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said plant.

78. (Currently Amended) A commercially acceptable broccoli plant or its parts produced from the seed of claim 77 75.

79. (Currently Amended) A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 78, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed

to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said regenerated plant.

80. (Currently Amended) A tissue culture of the broccoli plant of claim 78 according to claim 79 comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said regenerated plant.

81. (Currently Amended) A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 80 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 80⁵°F for at least 1520 days during the growth cycle of said plant.